We want to thank reviewers for insightful comments, and we will improve the paper accordingly. In the following, we focus on technical questions.

**Reviewer 1**

**Q1:** “One missing detail in the results is to report average performance with standard deviation to show the significance of this improvement, especially that some results are close to each other.”

**A1:** We will add the standard deviation and error bars.

Thanks for your appreciation on this work.

**Reviewer 3**

**Q1:** “There are a lot of notations in this paper, it will be easier to read and follow if there is a single table to explain the meaning of those notations”

**A1:** We will add a table to summarize and explain all notations.

**Q2:** “Will you plan to publish the code of experiments?”

**A2:** We will publish the code after the acceptance of this work.

Thanks for your appreciation on this work.

**Reviewer 4**

**Q1:** “The experiments … It seems to be mostly on UCI datasets”

**A1:** MNIST is not UCI data. We use these datasets simply because they have been popularly used as baselines for forest approaches [3,5,31]. We will add some non-UCI datasets, e.g.,

<table>
<thead>
<tr>
<th>Dataset</th>
<th>#Instance</th>
<th>MLP</th>
<th>RF</th>
<th>XGBoost</th>
<th>gcForest</th>
<th>MDDF</th>
</tr>
</thead>
<tbody>
<tr>
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<td>98.567±0.028</td>
<td>99.133±0.024</td>
<td>99.404±0.026</td>
<td>99.427±0.041</td>
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<td>98.997±0.039</td>
<td>98.795±0.021</td>
<td>99.105±0.017</td>
<td>99.274±0.033</td>
<td>99.289±0.038</td>
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